

Practice Assessment 8

Partial Fractions

These **practice problems** are designed to help you **prepare for our course exams** and **assess your understanding** of the course material at the expected level. Aim to complete them **in class, during tutoring, office hours, or on your own**, and try to solve them **without notes or a calculator**, just like on the **actual exams**. Remember, **practice makes perfect**, so don't hesitate to **ask for help** if you get stuck.

1. Compute the following integrals:

(a) $\int \frac{1}{x(x-1)(x-2)} dx$

(b) $\int \frac{4x-7}{x^2-x-6} dx$

2. Compute the following integrals:

(a) $\int \frac{x+2}{(x-1)^2} dx$

(b) $\int \frac{x+7}{x^2(x-2)^2} dx$